

TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P028P08PCT	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/JP2005/003220	International filing date (<i>day/month/year</i>) 18.02.2005	Priority date (<i>day/month/year</i>) 18.02.2004	
International Patent Classification (IPC) or national classification and IPC C07H15/04, C07D339/04, G01N27/62, G01N33/547			
Applicant JAPAN SCIENCE AND TECHNOLOGY AGENCY			

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of 10 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>

<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2005/003220

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____, which is the language of a translation furnished for the purposes of:

 - international search (Rule 12.3 and 23.1(b))
 - publication of the international application (Rule 12.4)
 - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

the international application as originally filed/furnished
 the description:
 pages 1–17, 19–64, 66–69, 71–86 as originally filed/furnished
 pages* 18, 65, 70 received by this Authority on 16.12.2005
 pages* _____ received by this Authority on _____
 the claims:
 nos. 2, 6, 9 as originally filed/furnished
 nos.* _____ as amended (together with any statement) under Article 19
 nos.* 3–5, 7, 8, 10 received by this Authority on 16.12.2005
 nos.* 1 received by this Authority on 11.05.2006
 the drawings:
 sheets fig. 1–23 as originally filed/furnished
 sheets* _____ received by this Authority on _____
 sheets* _____ received by this Authority on _____
 a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. The amendments have resulted in the cancellation of:

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____
4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____
 the claims, nos. _____
 the drawings, sheets/figs _____
 the sequence listing (*specify*): _____
 any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-10	YES
	Claims	_____	NO
Inventive step (IS)	Claims	_____	YES
	Claims	1-10	NO
Industrial applicability (IA)	Claims	1-10	YES
	Claims	_____	NO

2. Citations and explanations (Rule 70.7)

Citations

Document 1: JP 2003-83969 A (Japan Science and Technology Corp.), 19 March 2003

Document 2: JP 11-512518 A (Pharmacia Biosensor m, A. B.), 26 October 1999 & WO 97/09608 A1 & US 5955729 A & EP 850407 A1

Explanations

Document 1 discloses a linker compound that is capable of affixing a saccharide to a support for analyzing proteins (e.g., a surface plasmon resonance chip or the like) in a single stage; a ligand that employs said linker compound; and a support for analyzing proteins, which is obtained by affixing said ligands upon the surface of a support member. On the other hand, the inventions set forth in the present international application differ from the invention disclosed in document 1 with regards to the type of saccharide that is affixed thereto. However, the saccharides with a reducing terminal that are employed in the inventions set forth in the present application are well known, and the saccharide that bonds to the aromatic amino group (i.e.,

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITYInternational application No.
PCT/JP2005/003220**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

one moiety of the linker compound) in the invention disclosed in document 1 is a glucose, which is to say a sugar that has a reducing terminal. Such being the case, it is not considered to require significant creative ability for a person skilled in the art to conceive of configuring so that the saccharide in the invention disclosed in document 1 is a well-known saccharide that has a reducing terminal; consequently, the inventions set forth in claims 1 to 9 do not involve an inventive step.

In addition, document 2 discloses a feature wherein the sample is subjected to a mass spectrometry analysis subsequent to the completion of the surface plasmon resonance measurements; consequently, the invention set forth in claim 10 does not involve an inventive step.